## **REMARKS/ARGUMENTS**

At present, claims 1-16, 18-25, 27-44 and 47-49 are pending in the application. Claims 27, 28, 30-44 and 47-49 are withdrawn from consideration and claims 1-16, 18-25 and 29 currently stand rejected. By the present amendment, claim 1 has been amended and claims 2-3, 27, 28, 30-44, and 47-49 have been cancelled. Based on the following remarks and forgoing amendments, reconsideration of the application is respectfully requested.

## §101 Rejections

Claims 1-16, 18-25, and 29 are rejected under U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

The Examiner cites In re Bilski for the proposition that subject matter that does not meet the machine or transformation test formulated by the Court of Appeals is not patentable. The machine or transformation test is not the sole test for deciding whether an invention is a patent eligible process. *Bilski et al. v. Kappos*, \_\_ US \_\_ (2010). The Supreme Court went on to clarify that while the holding in *Diamond v. Diehr*, 450 US 175 (1981) supported the proposition that an abstract idea, law of nature, or mathematical formula could not be patented, "an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." *Diehr* at 187. The Applicant respectfully submits that claim 1 represents a process deserving of patent protection.

Claim 1 is directed to a method for documenting a transfer of authority of control for a container from a first entity of a transportation chain to a second entity of the transportation chain. The method includes receiving in an electronic seal associated with the container an electronic container control certificate associated with a first entity. The electronic container control certificate comprises a cryptographic key associated to the second entity, and which container control certificate is digitally signed by the first entity. The method further includes receiving in the electronic seal associated with the container, geographic location data from a location recording device associated with one of the first and second entities.

The Applicant respectfully submits that claim 1 is not directed to subject matter that is excluded from patentability. Claim 1 is not directed to an abstract idea, law of nature, or

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mathematical formula but rather an industrial process, i.e., a process for tracking containers in transit and ensuring that the containers are properly documented, that is deserving of patent protection. However, in order to further prosecution, claim 1 has been amended to further define the electronic seal. The electronic seal is defined as including an interface for receiving a container control certificate, a log for recording data, and a control unit for verifying data received through the interface. The Applicant respectfully submits that the interface should be considered as being physical structure for receiving the control certificate. The interface is not software as proposed by the Examiner, but rather a communication port that is capable or receiving data. Moreover, the control unit should also be properly considered as structure and not merely software.

## §103(a) Rejections

Claims 1-16, 18-25, and 29 are rejected under 35 U.S.C. §103(a) as being unpatentable over Girault et al. (US 5,768,379) in view of Arnold (US 6,456,716), and further in view of Yagesh (US 2004/0113783).

Girault et al. is directed to a system for checking limited access to authorized time slots renewable by means of a portable storage device. The system provides limited access to buildings by personnel having a data key. The data key includes a data element pertaining to a particular time slot having a signature. Electronic locks capable of verifying the signature provide access to a guarded location. Initially, it should be noted that Girault et al. does not pertain to protecting articles in transportation let alone an electronic seal for a container. In addition, Girault et al. does not teach transferring a container control certificate including a cryptographic key to an electronic seal for a container. At best, Girault et al. teaches storing a data element having a particular signature on a key card that operates a lock. Girault et al, does not teach transferring the data element to the lock but rather reading the data element from a key card to activate a lock. More specifically, the arrangement in Girault does not teach receiving in an electronic seal a control certificate associated with a first entity, let alone the particular form of control certificate claimed.

The Examiner relies upon Arnold for teaching the particular type of container control certificate. As noted in the previous response, Arnold does not teach <u>transferring</u> a container

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control certificate including a cryptographic key to an electronic seal for a container. Arnold simply teaches reading and decrypting a certificate. The Applicant respectfully submits that the combined teachings of Girault et al. and Arnold would, at best, teach a key card including a cryptographic data element stored as a digital certificate, and a lock capable of reading and decrypting the digital certificate.

Claim 1 also requires receiving in the electronic seal associated with the container geographic location data from a location recording device associated with one of the first and second entities. In order to allegedly teach this claim limitation, the Examiner relies upon Yagesh. Yagesh is directed to a container integrity management system. In Yagesh, a container locking seal is removably coupled to a container. The locking seal includes an anti-tamper sensor and a seal communications device. A state recorder is disposed in a cargo transport vehicle that is transporting the container. Route data corresponding to a path traversed by the cargo transport vehicle is provided. An actual position of the cargo transport vehicle is tracked and an alarm is sounded if the position of the cargo transport vehicle does not correspond to the route data. The route data is stored in the state recorder. While the locking seal communicates with the state recorder, there is no transfer of geographic location data from the state recorder to the locking seal.

Despite the above distinctions, in order to further prosecution, claim 1 has been amended to now also require storing the container control certificate in the log of the electronic seal, and verifying the signed container control certificate by a corresponding function implemented in the electronic seal. Contrary to the position taken by the Examiner, Girault does not teach storing container control certificates <u>in</u> the electronic seal or verifying the control certificate through a function implemented <u>in</u> the electronic seal.

The remaining claims depend from independent claim 1, which, for the reasons set forth above, the Applicant submits are allowable over the prior art of record and thus will not be discussed in detail. However, the Applicant reserves the right to argue the separate patentability of each of the remaining dependent claims.

Based on the amendments to the claims, and the above remarks, the Applicant respectfully submits that the present invention is patentably defined over the prior art of record

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such that allowance of all claims and passage of the application to issue is respectfully requested. If the Examiner should have any additional questions or concerns regarding this matter, he is cordially invited to contact the undersigned at the number below in order to further prosecution.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 50-0510.

Respectfully submitted, Cantor Colburn LLP

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